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Value Chain Envy: Explaining New Entry and Vertical Integration in Popular Music*

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abstract The concepts of value creation, value capture, and value protection are employed to explain new entry and vertical integration. It is posited that if, at one stage of the value system, the share of value captured is disproportionally higher than the share of value created, value chain envy will ensue. This value chain envy will result in new entry and vertical integration towards that desirable stage provided that the means of value protection available to the incumbents can be overcome. Within the popular music industries, the value created at the stage of music publishing has diminished steadily over the course of the 20th century, but the value captured has remained high. This has triggered value chain envy both inside and outside of the value system. The data presented in this paper show high levels of vertical integration into that stage originating primarily from the stages upstream in the value system, while the level of new entry has been comparatively low. At the same time, the data indicate that the recent introduction of new information communication technologies (ICT) have not significantly affected the levels of new entry and vertical integration into music publishing.

INTRODUCTION

This paper aims to investigate the origins and the consequences of profit differentials among stages within a single value system (Porter, 1985). By applying the concepts of value creation, value capture and value protection (Foss, 2003) to the vertical setting of a value system, the occurrence and viability of vertical integration and new entry are explained.

So far, the origins of profit differentials have been investigated within two streams of literature. The strategic management literature endeavours to explain profit differentials among firms, while the industrial organization literature

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attempts to explain those differentials among industries. Within the strategic management literature, profit differentials among firms have been linked to the ownership of particular resources (Barney, 1986; Conner, 1991; Dierickx and Cool, 1989; Montgomery and Wernerfelt, 1988; Peteraf, 1993; Wernerfelt, 1984), and capabilities (Amit and Schoemaker, 1993; Nelson and Winter, 1982; Teece et al., 1997) that bestow a firm with the ability to create and sustain a competitive advantage vis-à-vis its rivals. The industrial organization literature, on the other hand, links profit differentials among industries to the existence of barriers to entry (e.g. Bain, 1956) or mobility (e.g. Caves and Porter, 1977) that enable incumbent firms in particular industries or strategic groups to enjoy profits without fear of attracting new entrants.

While both approaches serve to better understand the origins of profit differentials, they have thus far largely neglected the vertical dimension of the value system in which a particular industry is embedded. In contrast, the present paper emphasizes the vertical dimension, considering horizontal competition in the context of vertical relations. We use insights from both theoretical approaches mentioned above, as well as the conceptual framework of the selection system (Wijnberg, 1995; Wijnberg and Gemser, 2000). Selection systems seem a particularly useful tool for analysis as they provide a shorthand description of how value is created in competitive processes. The basic premise is that rival firms compete to create value for the final customers and in doing so hope to become chosen by the relevant selectors. As such, the selectors can greatly influence the outcome of competitive processes.

The central proposition advanced in this paper is that the desirability of being located at a particular stage of the value system is determined by the ratio between captured and created value at that particular stage. Firms at each stage create a share of the value of the final product. At the same time, these firms are able to capture a share of the exchange value (i.e. the price that has been paid for the final product). If firms at a given stage tend to capture more value than they create (i.e. the ratio between captured and created value is greater than 1 for that stage), then actors in other stages of the value system could experience value chain envy and hence be motivated to vertically integrate into that desirable stage. Actors outside of the value system can also experience value chain envy; this will trigger new entry into the value system. The feasibility of both these strategic responses, however, depends on how well value is protected at the desirable stage.

This approach looks at vertical integration and new entry as essentially equivalent phenomena: the initiation of a new business activity, be it from within or from outside the value system. Moreover, it overcomes a number of problems accompanying previous endeavours. One contribution of this approach is that vertical integration is not viewed from a single-firm perspective, as is standard practice especially within transaction costs economics, but from the perspective of the overall value system. A single-firm perspective on vertical integration becomes

problematic as it assumes a ceteris paribus clause to hold for the remainder of the value system, thereby disregarding the fact that competing firms at other stages might be just as keen to realize similar goals. This could potentially thwart a given firm's attempts at vertical integration. This ceteris paribus clause is implicitly incorporated, whether looking at vertical integration as a response to uncertainty (Pfeffer and Salancik, 1978; Thompson, 1967), communication costs (Casson and Wadeson, 1998; Wadeson, 1999), or hold-up problems (Klein et al., 1978; Williamson, 1975, 1985).

A second contribution pertains to the literature on new entry, as it rarely investigated how barriers to entry differed between the various stages of value system of which an industry forms a part. As such, the approach presented here might provide a more encompassing theory of both the origins and consequences of profit differentials within value systems, thereby complementing the existing explanations of vertical integration and new entry (Winter, 1984).

THEORY

Value Creation, Protection and Capture

Within the strategic management literature, the concept of value plays a pivotal role in the study of a sustainable competitive advantage. To explain profit differentials between firms one needs to take into account not only the creation of value but also the available means of appropriating this value in a competitive context (Zajac and Olsen, 1993). In this regard the distinction made by Bowman and Ambrosini (2000) between value creation and value capture seems useful. They define value creation as the contribution to the utility of the final good to end users and value capture as the difference between revenue and cost retained by the firm For the purposes of the present paper, however, revenue should be understood as the price paid by the buyer downstream, while cost is equated to the price paid to suppliers upstream. Foss (2003) noted that in addition to creating and capturing value, firms also deploy resources to protect themselves against the threat of competitive imitation (value protection).

The distinction between the creation, capture and the protection of value seems useful for a closer examination of vertical relations that exist within the value system. Firms are generally regarded to compete with firms occupying the same stage(s) in the value system, and success in this dimension is a prerequisite for profit. However, as actual transactions take place with firms upstream and firms downstream in the value system, it is this vertical dimension along which a firm's profits are actually generated. Thus, firms can be considered as being engaged in competition along two axes: horizontally, by preventing competitive imitation of this value creating activity through value protection; and vertically, by realizing profits from this value creating activity through value capture.

In the literature, value creation is usually not treated as a contentious issue. Standard textbooks equate the value of a product with the economic value to consumers, defining how much a consumer is willing to pay for the final product (Kotler, 2000). Yet how much a consumer is willing to pay is not exogenous to the competitive processes that firms are involved in, but can be said to be determined by the set of relevant selectors (Wijnberg and Gemser, 2000). In any given industry, a particular selection system can be discerned describing how the selected (rival) firms are competing with each other to satisfy the preferences that have been set for a particular product by the relevant selectors. In a market selection system, the producers are selected directly by the consumers, but other selection systems are possible (Wijnberg and Gemser, 2000). The producers (rather than consumers) function as selectors in a peer selection system. In an expert selection system, a third party (neither the consumer nor the producer) is given the task of assessing value using specialized knowledge and/or distinctive abilities. An example of expert selection would be physicians prescribing a particular pharmaceutical product to their patient. The physicians are neither the consumers nor the producers of the medicine, yet they are the relevant selectors because they determine the use value of the product. Hence, pharmaceutical firms are vying to win the favour of these selectors.

Within a vertical setting, it can be said that the value system is basically a series of vertically aligned (sub)markets, each with its respective set of selectors. The ones judging the final product are the perhaps the dominant set of selectors within the value system. The selectors in the (sub)markets upstream attribute value to resources partially based on the anticipated contribution that they will make to the overall value of the final product. However, selectors at each stage might additionally have unique sets of criteria for assessing created value, and they might try to influence the selectors that determining the value of the final product. As will become obvious from the discussion of the music industries, particular selectors play a crucial role in determining the value of the final product of the value system of the music industries and hence a crucial role in determining the outcome of the dynamics of the value system.

Protecting value is mainly a horizontal activity as it is concerned with preventing competitive imitation of (potential) competitors. Horizontal competition takes place among firms with similar value chains and operating within the same stage(s) of the value system. As has been emphasized by both the advocates of the resource based view (Barney, 1986; Conner, 1991; Dierickx and Cool, 1989; Montgomery and Wernerfelt, 1988, Peteraf, 1993; Wernerfelt, 1984) and the authors supportive of the dynamic capability perspective (Amit and Schoemaker, 1993; Nelson and Winter, 1982; Teece et al., 1997), firms can only maintain superior performance by warding off competitive imitation. Several means of value protection that have proven themselves to be effective to prevent competitive imitation have been discussed in the literature. They can either be formal, taking the shape of

institutionalized monopolies such as patents (Cohen et al., 2000; Levin et al., 1987; Mansfield et al., 1981) and copyrights (Towse, 2000) or be non-formal, such as causal ambiguity (Lippman and Rumelt, 1982; Reed and DeFillippi, 1990), isolating mechanisms (Rumelt, 1984), the threat of loss of reputational capital (Gemser and Wijnberg, 2001) or economies of scale (Levy, 1985; Mankiw and Whinston, 1986).

Capturing value – like creating value – is mainly associated with the vertical dimension of the value system. It depends on the bargaining power vis-à-vis neighbouring stages: buyers downstream and suppliers upstream (Priem, 2001). The amount of value being captured at the respective stages of the value system is the outcome of the competitive processes taking place among firms with dissimilar value chains located at different stages of the value system. Therefore profits are ultimately made vertically and not horizontally, as the product passes through the sequence of supplier-buyer relationships that make up the value system.

Teece (1986) was among the first to present a more integral approach to the relationship between creation, capture and protection of value within a vertical setting, albeit implicitly. He described how inventors, although being the owners of patents, were unable to market their products successfully because the competition controlled the complementary assets in the areas of marketing and distribution that were required to commercialize the product. The full exploitation of the invention could only be realized if the innovators were allowed enough time to develop those complementary assets further downstream. Teece notes, however, that patents as a means of protection may only ward off competitive imitation for a limited period of time, as the competition can eventually innovate their way around the original invention. One way to resolve this problem quickly is through the acquisition of a firm that holds those complementary assets. However, acquisition is not always a realistic option – especially for SMEs. It might be more feasible to form alliances with (rather than taking ownership of) firms holding the complementary assets (Shane, 2001). As will be discussed subsequently, seeking alliances has been the strategy of choice for the suppliers of creative inputs in the music industries.

Value Chain Envy

Teece's (1986) conceptualization of complementary assets provides some useful insights for analysing the vertical relationships among firms. However, its application within the current context remains problematic. Firstly, the complementary assets as used in Teece's analysis are defined in an ambiguous fashion and seem to be employed alternately to describe value creation, protection, and capture. Initially, Teece (1986, p. 288; 1992, p. 8) defines complementary assets as marketing and distribution channels, which basically refer to value creating activities at stages further downstream. Further on, however, Teece (1986, p. 290) used complementary

tary assets as if they were means of value protection, providing barriers to imitation by (potential) rivals of the innovator. In the same 1986 paper (see, for instance, pp. 295, 299), the concept of complementary assets is employed to denote value capture when he concludes that the initial inventors may not be able to enjoy the returns of an invention if they lack the necessary complementary assets. Secondly, although Teece did discuss value creation, protection and capture in a vertical context, the focus of his analysis remained on the horizontal competition among firms with similar value chains (i.e. residing at the same stages within the value system). When the complementary assets in other stages are relevant, then Teece holds the focus on the (horizontal) competitive battle and argues that that battle will be won by the firm that is the first to lay its hands on those complementary assets. Moreover, Teece also takes a single firm perspective that does not take into account the perspectives of the firms elsewhere in the value system. A niche associated with a valuable complementary resource might attract the interest of firms from both ends of the value system. Battles among a set of rivals upstream might run headlong into the battles raging among a separate set of rivals downstream as players both above and below the attractive niche struggle to enact conflicting views of the structure of the value system.

In contrast to Teece's approach, the struggle to capture value is portrayed in this paper as a constant 'tug-of-war' among vertically related actors within the value system. Just as industries differ with respect to the availability of the means to capture value (Cockburn and Griliches, 1988), the various individual stages in the value system can, and usually will, differ with respect to the availability and efficacy of the means to capture value. Figure 1 illustrates value creation and value capture at the different stages of a hypothetical value system involving 'Product X'. There are four stages in this hypothetical value system: the suppliers of primary input, the producers, the distributors, and the retailers.

Value creation in this context relates to the distinct value creating activities as the product passes through the different stages at which value is added, eventually accumulating into the value held by the final product, as perceived by the final set of selectors. As such, each stage will contribute – in the eyes of the final selectors – a particular percentage of the created value contained by the final product. Graphically, in Figure 1 the length of the grey bar represents the share of the total value that was created at that stage.

Capturing value from 'Product X' depends on the relative bargaining power a firm enjoys vis-à-vis firms at neighbouring stages: the buyers downstream and the suppliers upstream. As such, capturing value is the outcome of the competitive processes taking place among firms with dissimilar value chains. As mentioned earlier, profits are ultimately made vertically, not horizontally, as the product passes through the sequence of supplier-buyer relationships that make up the value system. Again, the amount of value capture in the value system as a whole is expected to

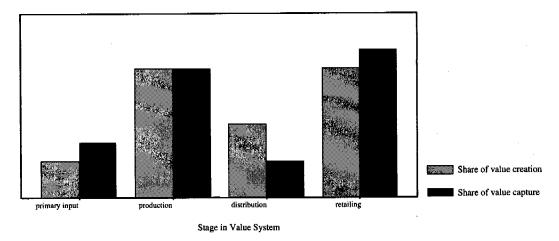


Figure 1. Shares of value creation and value capture in a hypothetical value system

equal to the final exchange value (the price paid for the final product). The black bars represent the percentage of that total value that is captured within each stage.

The value system can be considered to be in equilibrium when at all stages the ratio capture/creation = 1. However, as firms strive for a maximization of their share of value capture, they create a 'tug of war' among the different stages within the value system. Once firms residing at particular stages of the value system, such as the retailers of 'Product X' in our hypothetical example, are able to skew the proportion between value captured and value created at their stage in their favour, the value system will be out of equilibrium. This disequilibrium could in turn give rise to value chain envy. That is, actors in other stages might envy and/or resent those who are able to capture a disproportionately large share of the exchange value relative to the share of the use value that they create.

The potential new entrants (actors currently outside of the value system) presumably would also show a preference for stages in which the share of value that can be captured is greater than the share of value that must be created. However, the overall desirability and feasibility of both vertical integration and new entry will be greatly influenced by the means of value protection employed by the incumbents of those stages. Notably, value protection only becomes relevant after the relation between value creation and value capture has resulted in making a stage desirable. The availability of strong means of value protection per se says little about the attractiveness of a stage.

Proposition 1: If, at one or more stages of the value system, the share of value captured is disproportionately higher than the share of value created, then the frequency of new entry and vertical integration into these stages will be high relative to the other stages, provided that the means of value protection available to the incumbents can be overcome.

As explained above, the value system is said to be out of equilibrium when one or more stages have a ratio of value capture to value creation that is greater than 1. However, a value system that is out of equilibrium will always contain one or more stages where the ratio between value capture and value creation is less than 1. These stages are inhabited by actors who are losing the 'tug-of-war'; some of the value that they have created is captured elsewhere in the value system. In Figure 1, the distributors represent such a stage. Presumably, value chain envy is strongest among the actors at this stage since they are not able to recoup the value they have created. Consequently, the actors at this stage would have the greatest propensity to vertically integrate. Of course, the means of value protection at the more desirable stages would influence both the number and the success rate of those vertical integration attempts. In Figure 1, the distributors might want to act on their value chain envy by vertically integrating into retailing. This leads to the second proposition.

Proposition 2: The actors in stages at which the share of value captured is lower than the share of value created will have the greatest propensity to vertically integrate into other stages provided they can overcome the relevant means of value protection.

Note that if firms residing at a certain stage are systematically unable to capture the share of value that is equivalent to the share they create in the eyes of final selectors, it does not necessarily imply loss making – even in the long run. A price that is less than just, in terms of the ratio between value capture and value creation, can still very well be above break-even. Therefore, the distributors of product X may very well be profitable. The reverse can also hold: capturing more value than is created at a particular stage is not a guarantee to make profit; it only allows a firm a greater potential, compared to firms at less advantageous stages, of making a profit. At the same time, it certainly is true that some firms at every stage must make a profit for the value system as a whole to continue in the existing configuration.

THE RECORDED MUSIC INDUSTRIES

While these propositions are applicable to any value system, the music industries provide a particularly attractive setting for studying value creation and appropriation. Crossland and Smith (2002) have analysed how value is created in the fine arts industry. Miller and Shamsie (1996) have investigated how value is captured in the movie industry. Gemser and Wijnberg (2001) have looked at issues of value protection in the design industry. Although the literature on the music industries is voluminous, and both value capture and value protection have received much scholarly attention (Caves, 2000; Towse, 2000), no systematic analysis has been

undertaken to study the implications of the relations between value creation, value capture and value protection for the dynamics of the value system as a whole.

To fully understand the dynamics of this value system, a historical perspective is necessary. Notably, two waves of technical innovations induced Schumpeterian shocks that fundamentally changed the way business was done in the value system: the advent of analogue recordings and the subsequent advent of digital recordings. These innovations therefore provide meaningful transition points, separating three distinct historical phases in the evolution of this value system.

Phase 1: Prior to Recorded Music

Prior to the advent of recorded music, popular melodies were purchased in the form of published sheet music so that they could be reproduced in other theatres or at home (Caves, 2000). During this era, composers were typically contracted by music publishers, who took on the activities of printing and distributing the sheet music to the retailing industry. More importantly, the music publishers endeavoured to make the composition a commercial success through marketing activities. The most effective way to do so was by convincing popular singers or bandleaders to play their songs, because the average consumer would follow their lead. In effect, popular singers and bandleaders functioned as the relevant selectors, determining the value of a particular song (Segrave, 1994). As such, the value system in this area basically consisted of five distinct value-creating activities: composing, writing lyrics, performing, music publishing, and retailing.

The main form of value protection for music publishers was based on economies of scale. These had proven to be an effective means of warding off competitive imitation since as early as the 18th century (Scherer, 2001). As a consequence, composers could generally not invade the stage of music publishing. Although copyright was already installed as a legal institution and consequently provided ample value protection to the composer, it did little in terms of capturing value. Rather than risking a song to be left idle, the composers generally traded part of their entitled copyright royalties in order to get a song published (Caves, 2000). Thus rather than protecting the interests of the composers and the lyricists, copyright proved to be a useful tool for music publishers to prevent competitive imitation by their rivals (Segrave, 1994).

With respect to value capture, most composers were receiving a meagre salary. The plight of lyricists in those days was even worse, as they were hardly remunerated for their efforts (Segrave, 1994). The publishers, because of their relations with the relevant selectors, were the ones who could make a song successful and also the ones who captured most of the financial rewards. When the music publishers were not 'adequately' rewarded, the chances of a song becoming a hit single were greatly diminished (Caves, 2000). Even when the composers and the lyricists came to enjoy more economic independence during the 1920s and 1930s, music

publishers still retained substantial bargaining power. The revenue derived from copyrights was equally divided between the publisher and the composer/lyricist. This 50/50 split regarding value capture became institutionalized as this essentially fixed division of royalties was enforced by newly founded organizations such as ASCAP (American Society of Composers, Authors, and Publishers) (Caves, 2000).

Phase 2a: Recorded Music

The arrival of analogue recording technology significantly changed the way in which music was produced and consumed. It created a market for recorded music that partly replaced the conventional demand for sheet music and live performances. Moreover, manufacturing multiple copies of a sound recording required additional value creating activities: the recording and reproduction of sound. Existing value-creating activities were greatly affected as well; the methods of publishing, distribution, marketing, and retailing had to be substantially revised to meet the demands of the market for sound recordings.

The value system that emerged is depicted in Figure 2. Each stage denotes a particular value creating activity. Composers create the musical work and the lyricists write the text. The performing artists play the music 'live' in concert or in a recording studio. The music publishers publish sheet music and are responsible for the collection and administration of royalties derived from the musical work. The record companies are responsible for the sound recording, reproduction, and distribution of the musical work in the form of records, compact discs, etc. Finally the retailing sector sells the sheet music or sound recording to the final consumer.^[1]

A development that ran parallel to the introduction of recording technology was the emergence of a broadcasting system. After initial scepticism, the record companies embraced radio as the preferred outlet for their marketing endeavours (Caves, 2000). Consequently, the popular bandleaders were largely replaced by

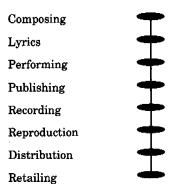


Figure 2. The value system of recorded music

radio DJs (and later VJs) as the relevant selectors, determining the value of the final product. Getting a song on the air proved vital for realizing record sales, and accordingly the record companies competed for the favour of the DJ (Peterson and Berger, 1975).

In terms of value protection, the major record companies enjoyed vast economies of scale in the areas of recording, reproduction, and distribution (Burnett, 1996; Caves, 2000; Kretschmer et al., 1999a). This limited the number of players that could effectively carry out these activities (Burke, 1997). While the so-called independent record companies did exist, they found it necessary to form strategic alliances with major record companies in order to release a song internationally (Lopes, 1992). These alliances provided the majors with short-term financial benefits. Perhaps more importantly, the alliances allowed the majors to monitor the innovative behaviour of the independent record companies (Hesmondhalgh, 1996) and consequently make better-informed decisions regarding the takeover of these smaller competitors (Hellman, 1983).

The economies of scale in recording, reproduction, and distribution also enabled the majors to successfully enter publishing. Since the artists depended on the record companies for these scale advantages to make their copyright economically valuable, they had to accept deals that allowed the record companies to exploit the artists' copyrights. Ironically, copyrights became a means of value protection at a different stage of the value system than was originally intended (Kretschmer et al., 1999b; Towse, 2000).

In terms of value capture, it became indispensable to have closely knit relationships with the broadcasters – the relevant selectors in the era of recorded music. Since thousands of new songs are released every week, DJs were not able to personally evaluate each and every one when developing their weekly play lists (Vogel, 1998). Hence, DJs generally created a shortlist based on the 'advice' of the record companies. The record companies would plug certain songs to get them played and if this 'advice' was accompanied by monetary (or other) incentives, the chance of getting a song on the air was greatly enhanced (Peterson and Berger, 1975). The major record companies used their strong relationships with the broadcasting industry to skew the distribution of profits in their favour (Alexander, 1996; Burnett, 1992, 1996; Peterson and Berger, 1975, 1996; Rothenbuhler and Dimmick, 1982). This was a good investment for the record companies since airtime generally had a positive influence on sales.

The major recording companies could influence the relevant selectors in the broadcast industry and they also used of economies of scale to limit the number of rivals at that stage. This control of the downstream end of the value system gave the majors enormous bargaining power vis-à-vis the creative talent upstream in the value system. Vogel (1998) referred to this as a 'dealmaker's delight'. If composers and musicians wanted to get their music heard, they had to go through the record companies. Record companies negotiated long-term contracts with musi-

cians in the early stages of their careers, preventing them or rival record companies from capturing the rewards of stardom if the musicians eventually became commercially successful (Cameron and Collins, 1997; Kretschmer et al., 1999a).

Phase 2b: Music-Publishing and Value Chain Envy

Although music publishers traditionally made a considerable contribution to the success of a song, their role has greatly diminished after the introduction of recording technologies in the 1960s. Since that time, the functions of marketing and promotion have shifted from the publishers to the record companies (Negus, 1992). The publisher's role was further diminished by the cultural changes associated with rock music. Music publishers had traditionally provided performers with a musical repertoire developed by contracted composers (Caves, 2000). However, the reputation of rock stars increasingly became based on their ability to voice their own feelings and beliefs (Frith, 1996). This led to the prevalence of the singer-songwriter; performers became self-sufficient in this regard by composing their own material. This trend towards vertical integration in the artistic end of the value system caused further complications for music publishers. Singer-songwriters also were less willing to let publishers sell their songs to other performers because those performers were rivals for the singer as well as being customers of the songwriter (Caves, 2000). Music publishers increasingly functioned as brokers between the musicians and the recording companies instead of between the composers and the performers (see Figure 2). Eventually, the role of music publishers was reduced to just the administration and collection of copyright royalties (Caves, 2000).

Yet another impact of recording technology was that musical composition shifted from creating a melody to creating a 'sound' (Frith, 1996). An effective reproduction came to depend on a variety of new creative capabilities, such as: editing, engineering/mixing, arranging and producing (Becker, 1982; Denisoff, 1975; Frith, 1996). Consequently, sales of sheet music declined, as sheet music was no longer sufficient for reproducing a song. To make matters worse, it was no longer even necessary to create the sheet music. In 1976, a new copyright act was passed in the United States no longer requiring a song to be fixed in sheet music; a song's sound recording became sufficient to create copyright protection (Caves, 2000).

Notably, while the share of value creation from music publishers dramatically declined, their share of value capture remained at the level that was institutionalized by rights clearance organizations such as ASCAP in the 1920s: 50 per cent of the composer's royalty income (Butler, 2000; Caves, 2000; Vogel, 1998). Moreover, as the recorded music industries became increasingly reliant on the exploitation of music not as a commodity but as a right (Frith, 1987), the intellectual property rights connected to music publishing became increasingly lucrative, generating over 3 billion US\$ worldwide in 1990 (Burnett, 1996). Copyright as a means of value protection has been extended well beyond its original use of pre-

venting sheet music to be copied. Whenever a song is played on the radio, included in a movie or documentary, or reproduced as a record, the music publisher derives royalty income from the copyrights. Thus, the stage of music publishing has become an obvious target for value chain envy in the value system: its institution-alized share of value captured is disproportionately high relative to its contemporary share of value creation.

Yet, as publishing rights entitled the publisher to a percentage income from the royalties of a song, little income was generated where sales volumes were small. Scale was still essential for profitability. This meant that scale also remained as a means of value protection. However, it was difficult to achieve scale advantages solely in publishing. Economies of scope became increasingly relevant, and publishing increasingly became linked with other stages in the value system in order to achieve an effective means of value protection.

Phase 2c: Vertical Integration and New Entry in Music Publishing

As a consequence of the increased desirability of music publishing, other actors in the value system were tempted to vertically integrate into this stage. In particular, the major record companies stepped up their acquisition of successful publishing houses (Huygens, 1999). These majors could do so because they could achieve the economies of scale, especially in reproduction and distribution, which were necessary in music publishing. Backward integration by the major recording companies into the music-publishing sector has been remarkable over the last 15 years: Sony-CBS bought Blackrock (1987), Big Tree International (1989), and Conway Twitty (1990); BMG-RCA purchased Doubleday (1986), Dell (1986), and Lodge Hall/Milsap (1989); EMI took control over SBK Entertainment (1989), Combine Music (1989), and Filmtrax (1990); MCA obtained Mayday Mediarts Music (1989); PolyGram acquired Musiplex (1987), Lawrence Welk Music Group (1988), and Sweden Music AB/Polar Music (1989), Warner Incorporated Chappell Music Group (1987) and Mighty Tree Music Group (1990). As a result of all this M&A activity, the music-publishing departments of the majors record companies could offer recording artists a comprehensive contract that included all rights relating to a musical work (Wallis and Malm, 1984).

The exploitation of a new business activity in the music-publishing sector seemed to be within reach of the entrepreneurial musician as well; the financial endowments needed for operating as a music publisher were small (Burnett, 1996). However, it was unappealing for musicians to start their own music-publishing company, because the economies of scale in the areas of reproduction and distribution were essential for a song to become commercially successful (Burnett, 1996; Caves, 2000; Kretschmer et al., 1999a). Indeed, since the major record companies were now operating their own music-publishing departments, their bargaining position vis-à-vis the musicians was even stronger. As a consequence the musicians

were left with little incentive to integrate into music publishing as vertical integration would not yield extra means to capture value: the potential gain in value capture would be appropriated by the major record companies in the course of negotiating the record contracts because they controlled crucial assets further downstream. The only musicians that could effectively start their own musicpublishing company were the established artists (Negus, 1992; Sanjek and Sanjek, 1991). Because of their popularity, musicians like George Michael and Prince enjoyed a leveraged bargaining position with regard to the relevant selectors (the broadcasting industry) and could consequently free themselves from the dependence on the major record companies (Kretschmer et al., 1999a). In terms of value capture, their popularity gave them leverage comparable to that of the major record companies (Bradlow and Fader, 2001), and instead of the usual 50/50 split they could command a 20/80 division (Vogel, 1998) or even a 15/85 division (Negus, 1992) in their favour. The increase in bargaining power of these musicians left some independent music publishers with a very small margin indeed, as the operating costs could amount to as much as 12 per cent (Vogel, 1998). Consequently, independent publishing firms were forced to take a more entrepreneurial posture by contracting less successful composers. Although this strategy had the potential to generate higher premiums, these publishing firms also had to face increased risks, as most of the contracted composers would never attain breakeven sales, let alone commercial success. Further, if successful, these independent firms became the M&A target for the major record companies. Since the likelihood of commercial success was small, vertical integration by entrepreneurial musicians as well as new entry by newcomers remained limited.

Phase 3: Digitized Music

The digitization of the music industry started in the early 1980s when Sony and Philips teamed up to commercialize the compact disc. After overcoming their initial scepticism, the recording firms became convinced that the commercialization of the compact disc could be a potential goldmine (Nathan, 1999). However, the introduction of digitalization in several key technologies (MP3, home recording technologies, and the Internet) undermined the advantages that could be derived from the economies of scale in the areas of recording, reproduction, and distribution. These were the areas in which the major record companies had traditionally possessed a competitive advantage.

Traditionally, when artists were contracted by one of the majors, they were placed in the hands of producers and arrangers who 'guided' these artists. Often the label's commercial objectives clashed with the artist's sense of creative freedom. If that didn't make the artists mad enough, the labels' producers and arrangers subsequently claimed a percentage of the royalties as compensation for their input.

By the mid-1990s, personal computers became powerful enough to record music in a digital format. At the same time, digital recording software was developed, enabling musicians to move up from making poor quality tape recordings to making high quality digital recordings. This technology significantly reduced recording costs. Having access to sequencing and audio recording software at home also enabled musicians and composers to exert greater artistic control over their work. They could 'master' a composition without the interference of a major label. A major label was no longer necessary for product development.

The introduction of the MP3 format also had a dramatic effect on the value system. The MP3 format was invented in 1989 by the German Fraunhofer Institute and was standardized by 1991. It significantly reduced requirements for data storage and data transmission by compressing the original recording to 5–10 per cent of its original size. MP3 technology therefore played a pivotal role in driving down the costs of the reproduction and the distribution of a musical work. In combination with the opportunities offered by the Internet, MP3 technology laid the foundation for the success of peer-to-peer file sharing networks such as Napster (Alexander, 2002). Albeit largely an illegal activity, consumers could now perform the value creating activities of reproduction and distribution themselves (Alexander, 2002). As a result, the subjective use-value that the end-consumer placed on music reproduced and distributed by others (e.g. the record companies) dropped dramatically (Gallaway and Kinnear, 2001).

This turn of events indicated that the efficacy of economies of scale and copyright as means of value protection had been drastically reduced. Hence other agents inside and outside of the value system were now able to engage in competitive imitation in stages that they previously could not enter. This had three farreaching implications for the competitive environment, especially with regard to the stages of recording, reproduction, and distribution. Firstly, the marginal costs involved in the reproduction and distribution of a musical work have been greatly reduced because of ICT (Shapiro and Varian, 1999). As a consequence the economies of scale that the major record companies have enjoyed in these fields may be strongly diminishing, as some authors have argued (Dolfsma, 2000). Shirky (2001, p. 144) argues '[d]igital reproduction pushes those economics to the breaking point'. In this sense ICT proved to be the enabling technology for Napster and other file-sharing networks to become a success. Secondly, the (sunk) costs of recording a musical work have declined substantially by using digital recording technology (Leyshon, 2001). This sprouted the widely observed phenomenon of home recordings by the artists themselves. Thirdly, copyright as a means to ward off competitive imitation vastly eroded with the arrival of ICT. The music industry has yet to produce a viable response to ensure that copyrighted material cannot be illegally published, broadcast, rewritten, reproduced, or redistributed. As a consequence, illegal competitive imitation has been rampant at many stages of the value system; be it the composers using illegitimate samples taken from their peers,

Internet radios broadcasting songs without offering the usual remuneration, or the consumers engaging in illegal downloads via peer-to-peer networks.

Given the fall of these protective barriers and the perception that the share of value captured is disproportionately high compared to the share of value created in music publishing, an increase in new entry and vertical integration into music publishing is expected. Applying proposition 1 to the particular circumstances of the music industries gives us Hypothesis 1.

Hypothesis 1: Given that the share of value capture is disproportionally high given the share of value creation in music publishing and that the means of value protection can be overcome using information communication technologies, new entry and vertical integration into this stage should occur frequently relative to other stages.

The creative artists in the upstream stages of the value system (composers, lyricists and performers) often perceive the record company's influence on (commercialization of) their work as reducing (rather than adding to) the subjective use-value of end product. This resentment on the part of artists regarding value creation is accompanied by their resentment regarding value-capture: the record company claims a large portion of the royalties as compensation for what artists might perceive as unwanted, value-destroying input. Indeed, given the enormous bargaining power of the major record companies, the creative artists generally do not fare well in the tug-of-war for shares of the value captured. Since their share of value captured is small relative to their share of value created, creative artists are expected to experience value chain envy. Since they are keenly aware of their loss of royalties, music publishing would be one obvious target of their value chain envy. Applying proposition 2 to the particular circumstances of the music industries gives us Hypothesis 2.

Hypothesis 2: Composers, lyricists and performers will have the greatest propensity to vertically integrate since the share of value captured at those stages is disproportionally low relative to the share of value created, and information communication technologies have undermined the means of value protection for the more desirable stages of the value system.

THE MUSIC INDUSTRIES IN THE NETHERLANDS

While much of the literature on the music industry describes the US context, the structure observed in the Netherlands is similar in many respects. The major record companies in the Netherlands are the same as in the US market. The Dutch music industry is marked by a high level of foreign content; close to 80 per cent of the music that is bought is imported. These major record companies also market

most of the Dutch content. Apart from their advantages in reproduction and distribution the major record companies also have strong relationships with the Dutch broadcasting industry, just as they do in the USA. Indeed, the Dutch headquarters of all the major record companies are located in the vicinity of Hilversum (the centre of radio and television broadcasting in the Netherlands). Like in the USA, the musicians and other smaller players are generally dependent on the cooperation of the majors for handling downstream activities. Although Dutch copyright law differs from that of the USA, the economic effects of copyright law for the music industries, and music publishing in particular, are comparable in nature and significance. Therefore the Dutch case offers a fairly similar context for testing hypotheses about the music industry.

Methods

There were 884 firms listed with the Dutch Chambers of Commerce as music publishing companies or music reproduction companies in 2002. Due to financial and time constraints, 600 companies were randomly selected. An introductory letter was sent to each of these firms prior to a telephone interview. Three attempts were made to contact every company during regular business hours. If this did not result in a response, two further attempts were made after regular business hours. Usable data were obtained from telephone interviews with 146 of these firms (see Table I). The core of the questionnaire addressed the nature and scope of the activities that the respondent firm had undertaken throughout its existence.

The characteristics of the population made it difficult to contact many of these firms. First, many of these companies turned out to have no employees, so if the owner was absent nobody could answer the phone. Second, many of the day-to-day activities of these businesses take place away from the office (e.g. contacting prospective artists, making sound recordings). Third, many of these firms are not the primary sources of income for the owners. Since the owners were often employed elsewhere, almost 25 per cent of the interviews were administered after six o'clock in the evening.

Table I. Interview response rates

77	
Response	146
No contact	328
Non-music	48
Bankrupt	19
No relevance	22
Refusal	37
Total target sample	600

Close to 80 per cent of the questionnaires were answered by the founder, the owner, or the CEO of the company. Most of the companies were very small; over 90 per cent of the respondents had fewer than five employees. The median category with regard to turnover was 50–150 thousand euros for 2001.

Results

Table II summarizes the findings on the level of new entry and vertical integration. Since many of the companies were already vertically integrated to some degree, they are represented in more than one stage of the value system. Thus, column totals in Table II can exceed the number of companies interviewed. Yet other companies within the sample are not represented in Table II, as these were the result of founders setting up another company at the same stage of the value system, therefore being neither vertically integrating actors nor new entrants.

The frequencies of vertical integration and new entry are highest for the stages of music publishing and reproduction as predicted in Hypothesis 1. However, this might simply be due to a sampling bias since the sample was drawn from the population of Dutch firms currently active in these two stages. What is interesting is the relative frequency of new entry and vertical integration as the preferred entry mode into the different stages of the value system. Almost all new businesses in the upper end of the value system (composing, writing lyrics, and performing) are the result of new entry rather than vertical integration. At the lower end of the value system, however, the reverse was observed: almost all new businesses in publishing, recording, reproduction, distribution and retailing stemmed from vertical integration within the value system.

The vast majority of the newly founded companies in publishing were the result of vertical integration (42 out of 47). Figure 3 summarizes these findings on vertical integration (VI) into publishing at the outset of the firm. Notably, forward

Table II.	Entry	mode	in	the	music	industries	

Activities	New entry	%	Vertical integration	%	Total	%
Composing	5	83%	1	17%	6	100%
Lyrics	1	100%	0	0%	1	100%
Performing	7	70%	3	30%	10	100%
Publishing	5	11%	42	89%	47	100%
Recording	7	19%	30	81%	37	100%
Reproduction	3	19%	13	81%	16	100%
Distribution	1	7%	14	93%	15	100%
Retailing	3	19%	13	81%	16	100%
Total	32	22%	116	78%	148	100%

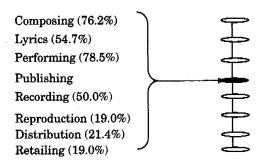


Figure 3. Propensity of vertical integration into music publishing 1928-2002

Table III. Vertical integration into publishing over three different time periods

	Before 1992	1992–1997	1997–2002	Total
Composing	15	14	14	43
. 0	71.4%	70.0%	73.7%	71.7%
Lyrics	16	9	9	34
,	76.2%	45.0%	47.4%	56.7%
Performance	16	14	15	45
	76.2%	70.0%	78.9%	75.0%
Recording	14	10	12	36
Ü	66.7%	50.0%	63.2%	60.0%
Reproduction	9	5	9	23
•	42.9%	25.0%	47.4%	38.3%
Distribution	9	6	7	22
	42.9%	30.0%	36.8%	36.7%
Retail	8	8	5	21
	38.1%	40.0%	26.3%	35.0%
Total	21	20	19	60
	100%	100%	100%	100%

integration (from the artistic end) into publishing is very popular. Over three quarters of these actors had a background in composing and performing. In contrast, backward integration (from the sales end) into publishing was much less popular.

A similar picture emerges when taking into account all 60 observed cases of vertical integration into publishing (see Table III). Again, the columns do not add up to 100 per cent because the firms typically were engaged in more than one activity when integrating into publishing. Notably, the rate of vertical integration into publishing remained stable over the three time-intervals. Contrary to Hypothesis 1, it appears that digitalization has not opened the floodgates for vertical integration and new entry into publishing.

It appears that innovations in ICT did not trigger forward integrate into publishing; composers, lyricists, and performing musicians reported that neither digitalization nor the Internet were important in decisions to move into publishing

Table IV. Import	ance of ICT for	integrating into	publishing	1992-2002
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	19921	997			1997–2002			
	Digitalization is important		Internet is important		Digitalization is important		Internet is important	
	Agree	Disagree		Disagree	Agree	Disagree	Agree	Disagree
Comp.	6	7	2	11	6	4	5	4
Lyr.	3	5	2	6	3	2	3	1
Perf.	6	7	2	11	5	6	5	5
Rcc.	3	6	1	8	4	4	5	2
Repr.	1	3	0	4	2	3	5	0
Distr.	3	2	0	5	2	1	3	0
Ret.	. 2	5	0	7	1	0	2	0

(see Table IV). However, a somewhat mixed picture emerges regarding the importance of digitalization for the lower end of the value system. The Internet has gained in importance in terms of explaining decisions to backward integrate into publishing.

DISCUSSION

The findings are somewhat mixed. The publishing and recording stages did show the highest frequencies of vertical integration and new entry, but this pattern might simply be due to sampling bias. Further, the advent of digital technologies has not yet triggered an increase in these frequencies. Thus, no strong support could be found for Hypothesis 1.

However, the vast majority of firms that vertically integrated into publishing came from the stages upstream in the value system associated with the creative artists (i.e. composers, lyricists, performers). This is consistent with the argument put forth regarding value chain envy: by integrating into music publishing, the creative artists could hope to capture more of the value they created (in particular, the income from royalties). Similarly, of the 82 music publishers active in 2002, 65 per cent reported that they were commercially exploiting their own compositions and 56 per cent were publishing their own lyrics under the umbrella of their own publishing company. This is consistent with Hypothesis 2.

One notable caveat is that nearly all of the newly founded firms in music publishing are very small firms; most of them have no employees and earn little income. Although this suggests that venturing a new business in music publishing does not require substantial financial endowments on the part of the entrepreneur, it also indicates that the means to capture value of these new publishing houses

are not impressive. Thus, while 'the publisher's role has contracted to the point that anybody can be a music publisher' (Caves, 2000, p. 310), effective value capture remains out of reach for most.

This might explain the lack of support for Hypothesis 1. Although ICT has had an effect on scale advantages in the field of recording, reproduction, and distribution, it hardly seemed to have an impact on the levels of new entry and vertical integration towards publishing. This suggests that there may have been another barrier to entry, other than the scale advantages, which were underlying Hypothesis 1. Thus the explanation for the advantageous position of the majors should be found in an area that has not (yet) been affected by the introduction of ICT. Other than scale advantages, the major record labels have for long enjoyed strong relationships with the relevant selectors in the broadcasting media (programme director, DJs, VJs, etc). These relationships have for long been regarded to yield a decisive competitive advantage to the majors (Burnett, 1996; Kretschmer et al., 1999a; Peterson and Berger, 1975) and allows them to effectively translate their possession of music publishing rights into profits.

The developments with regard to ICT do not seem to have affected these relationships and the resulting competitive edge of the majors. The situation could become different if the Internet could lead to significant changes in the determinants of competitive success, and therefore, of the selection systems, in the music industries. An example of such a change would be that consumers would start buying CDs or pay to download music that has first become popular among users of (illegal) download services instead of music that is frequently played on radio and television. However, there is yet little evidence of such a development taking place.

CONCLUSIONS AND SUGGESTIONS FOR FURTHER RESEARCH

The main theoretical argument of this paper was that the desirability of establishing a value chain at a particular stage in a value system depends on the relation between the value that can be created and the value that can be captured at that particular stage. When a value system is in equilibrium, the ratio between the shares of value capture and value creation is equal to 1 for all stages. If this ratio deviates from 1 in some stages, then the value system is out of equilibrium. Our argument is not applicable to a value system in equilibrium but serves to explain vertical integration and new entry in a system that is out of equilibrium. When the system is in disequilibrium, value chain envy will motivate firms to invade the more desirable stages of the value system, either through new entry or vertical integration. The feasibility of establishing a value chain at a desirable stage depends on the efficacy of the means to protect value at that particular stage.

With regard to the two theoretical approaches we described in the introduction and the theory section, this paper can be considered to have provided a contribution to a synthesis by providing a framework to explain the origins and consequences of profit differentials within a value system by explicitly linking possession of resources to create, protect and capture value with barriers to entry, horizontally as well as vertically. We used and extended Teece's insights about the interaction between competition at the stage of the producer and the relations with actors at other stages of the value chain. Although we found reason to criticize the ambiguousness of his term complementary assets, we also found that complementary assets have had great significance for the developments in the music industry. Precisely by distinguishing the roles these assets can play in respect to creating, protecting and capturing value at different stages of the value system, the essential causes and effects of industrial dynamics can be more usefully studied.

In this paper, the concepts of value creation, capture, and protection within value systems have been employed to analyse recent developments in the recorded music industries, particularly those affecting the stage of music publishing. Over the course of the 20th century the value created at the stage of music publishing diminished steadily, while the value captured remained high, making this stage highly desirable. On the basis of the proposed theoretical framework one could expect value chain envy to trigger new entry and vertical integration towards that stage. Only the major record companies managed to do so successfully, precisely because they managed to translate their strengths at the stages of recording and distribution into value protection at the stage of publishing.

This situation seemed likely to change with the introduction of new information communication technologies in recent years, which led to a significant erosion of the competitive advantage held by the major record companies in the areas of recording, reproduction, and distribution. This in turn was posited to lead to a decrease in the efficacy of value protection and the corresponding height of barriers of entry at the desirable state of publishing. However, upon closer examination of 146 companies active in the Dutch music industries over the period 1992-2002, a somewhat more nuanced picture emerges. Although most vertical integration could be traced back to stages where the value chain envy was most prominent, ICT seemed hardly to be an enabling technology for establishing oneself as a music publisher. Based on our data it would seem that the reason why the major record companies have been so effective in capturing value on the stage of music publishing may after all not be based on their scale advantages in the areas of recording, reproduction, and distribution but rather on their relationships with the relevant selectors, i.e. the broadcasting industry, which the smaller players still seem to lack. Even after the introduction of ICT it seems that one needs relationships with the relevant selectors before being able to compete effectively at the stage of music publishing.

The reasoning presented in this paper offers a number of suggestion for further research. Firstly, the empirical results presented in this paper, and the conclusions that could be drawn from them, provide further support for approaching the phenomena of vertical integration and new entry from an integral perspective. As is evident from our data the majority of entrants originate from other stages within the same value system. Both true 'de novo' entrants and entrants coming from within the same value system can be considered to have acted on similar grounds, responding strategically to observed disproportions between creation and capture of value. This strongly supports the argument for approaching all categories of entrants—whether 'de novo', 'de ipso', 'de alio' (Carroll et al., 1996; Dobrey, 2001) or vertically integrating agents—from a unified theoretical perspective.

Secondly, this study directs attention to the vertical distribution of assets and resources and their relation to how value is created, captured and protected. This approach could extend the usefulness of the resource based view, taking into account all resources at all stages of the value system to explain the competitive advantage a firm can derive from its particular set of resources.

Thirdly, by taking the role of the selectors into more systematic account the way in which firms establish or scale barriers to entry could be explained more coherently. It seems natural, when looking at barriers to entry from the RBV perspective, to take notice of the ways in which resources can be employed to make it more likely that the relevant selectors will be willing to evaluate the products of entrants as valid examples of the relevant product category.

NOTES

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[1] The reader should bear in mind, however, that Figure 2 is an abridged model of the value system of the recorded music industries; a more detailed representation could be drawn up, including other actors such as, managers/agents, studio musicians, sound engineers/mixers and producers. Furthermore, marketing is not listed as a specific value creating activity because in principle marketing is an element relevant to every stage in the value system.

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